WHAT IS CLAIMED IS:

Sub al

1. An original data circulation system for storing or circulating original data which is digital information said system comprising:

an apparatus including: means for

10 generating first information corresponding to an issuer apparatus for issuing data; means for sending said first information; and means for sending second information corresponding to said data; and

an apparatus including: means for

verifying validity of said first information which is received; means for verifying that an issuing apparatus corresponding to valid first information is valid; and means for determining that data corresponding to said second information is valid

20 when said issuer apparatus is valid.

2. An original data circulation method in an original data circulation system for storing or circulating original data which is digital information, said method comprising the steps of:

generating first information corresponding

30 to an issuer apparatus for issuing data;

sending said first information;

sending second information corresponding

to said data;

verifying validity of said first

35 information which is received;

verifying that an issuing apparatus corresponding to valid first information is valid;

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and

determining that data corresponding to said second information is valid when said issuer apparatus is valid.

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3. A data storing method of storing
10 digital information which has a value, comprising the steps of:

generating first information which is digital information with a signature signed by an issuer apparatus of said digital information;

generating, by said issuer apparatus, second information, said second information being a manifest corresponding to said digital information;

verifying, by a user apparatus, identity of said issuer apparatus by using said first

20 information and said second information; and preventing reproduction of said digital

information.

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4. The data storing method as claimed in claim 3, comprising the steps of:

obtaining a verification key issued by a 30 server which is stringently managed concerning issuance of digital information;

generating, by said user apparatus, session information from said verification key; and verifying validity of said session

35 information.

5. The data storing method as claimed in claim 3, comprising the steps of:

verifying the identity of said issuer apparatus by storing said second information in a tamper-proof device; and

preventing reproduction of said digital information.

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- 20 information; and
 a user apparatus for verifying the
 identity of said issuer apparatus by using said
 first information and said second information; and
 preventing reproduction of said digital
- 25 information.
- 7. The data storing system as claimed in claim 6, said user apparatus further comprising means for obtaining a verification key issued by a server which is stringently managed concerning issue of digital information;
- said data storing system further comprising a collector apparatus including:

 means for generating session information

from a verification key; and

means for verifying the validity of said session information.

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8. The data storing system as claimed in claim 6, said user apparatus further comprising:

means for verifying the identity of said incomprising and second information

issuer apparatus by storing said second information in a tamper-proof device; and

preventing reproduction of said digital information.

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9. A user apparatus for using digital
20 information in a data storing system for storing
digital information which has a value, comprising:

first storing means for storing and extracting digital information with a signature; second storing means for storing and

extracting a manifest corresponding to digital information;

first authentication means for verifying that said manifest is valid; and

first control means for storing said

30 manifest in said second storing means only when said
first authentication means verifies that said
manifest is valid.

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10. The user apparatus as claimed in claim

9, said second storing means and said first authentication means having a tamper-proof capability.

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11. The user apparatus as claimed in claim 9, said first authentication means including:

means for determining whether said digital information stored in said first storing means is valid by verifying that said manifest corresponding to said information is stored in said second storing means; and

information is valid only when said manifest is stored in said second storing means and determining that said digital information is invalid when said manifest is not stored in said second storing means.

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12. The user apparatus as claimed in claim 25 9, further comprising:

signature means for providing a signature to digital information;

second authentication means for verifying that the signer of said manifest is included in accredited objects and for verifying that the signer of accredited information and the signer of said digital information are the same; and second control means,

said second control means including:

means for extracting said manifest from
said second storing means when said user apparatus
moves said manifest from said second storing means

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to another storing means;

means for providing said manifest a signature by using said signature means;

means for deleting said manifest from said second storing means;

means for verifying that the signer of said manifest is trusted by the signer of said digital information by using said second authentication means; and

10 means for storing said manifest to said another storing means only when the verification succeeds.

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13. The user apparatus as claimed in claim 9, further comprising:

session information generation means for generating session information which has uniqueness in said data storing system;

said session information including a verification key of said user apparatus and a serial number, being stored in said user apparatus, and

25 sent to a sending party of said manifest;

wherein said user apparatus receives said manifest and said session information from said sending party and verifies that validity of received session information by using stored session

30 information such that said user apparatus prevents reproduction of said manifest.

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14. An issuer apparatus for issuing digital information in a data storing system for

storing digital information which has a value, said issuer apparatus comprising:

accredited information generation means for generating accredited information which includes a set of information representing an accredited object trusted by the signer of said digital information;

signature means for providing a signature to said digital information and to said accredited information;

manifest generation means for generating said manifest;

means for sending said digital information and said accredited information to a user apparatus;

means for receiving session information which includes a verification key of said user apparatus and a serial number; and

means for sending information including said manifest and said session information by using a verification key and a signature function of said issuer apparatus.

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15. A collector apparatus for exercising a right of digital information in a data storing system for storing digital information which has a value, said collector apparatus comprising:

means for receiving digital information with a signature of the issuer and accredited information with said signature from a user apparatus;

means for generating session information

35 which has uniqueness in said data storing system and sending said session information to said user apparatus;

means for receiving information including said manifest and said session information from said user apparatus; and

means for verifying that said session information, said manifest and said accredited information are valid.

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16. A data storing system for storing digital information which has a value, said data storing system comprising:

a user apparatus for using digital

15 information;

an issuer apparatus for issuing digital information; and

a collector apparatus for exercising a right of digital information;

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said user apparatus including:
first storing means for storing and
extracting digital information with a signature;
second storing means for storing and
extracting a manifest corresponding to digital

25 information:

first authentication means for verifying that said manifest is valid; and

first control means for storing said manifest in said second storing means only when said first authentication means verifies that said manifest is valid;

signature means for providing a signature to said digital information and to said accredited information:

manifest generation means for generating 5 said manifest;

means for sending said digital information and said accredited information to a user apparatus;

means for receiving session information which includes a verification key of said user apparatus and a serial number; and

means for sending information including said manifest and said session information by using a verification key and a signature function of said issuer apparatus;

said collector apparatus including:

means for receiving digital information
with a signature of the issuer and accredited
information with said signature from a user
apparatus;

means for generating session information which has uniqueness in said data storing system and sending said session information to said user apparatus;

means for receiving information including said manifest and said session information from said user apparatus; and

means for verifying that said session information, said manifest and said accredited information are valid.

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17. A computer readable medium storing
35 program code for causing a computer to store digital information which has a value, said computer being used as an issuer apparatus in a data storing system,

said computer readable medium comprising:

program code means for generating first
information which is digital information with a
signature; and

program code means for generating second information, said second information being a manifest corresponding to said digital information.

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18. A computer readable medium storing program code for causing a computer to store digital information which has a value, said computer being used as a user apparatus in a data storing system, said computer readable medium comprising:

program code means for verifying identity of said issuer apparatus by using said first information and said second information; and

20 preventing reproduction of said digital information.

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19. The computer readable medium as claimed in claim 18, comprising:

program code means for obtaining a verification key issued by a server which is stringently managed concerning issue of digital information:

program code means for generating session information from said verification key; and

program code means for verifying validity 35 of said session information.

20. A computer readable medium storing program code for causing a computer to store digital information which has a value, said computer being used as a user apparatus in a data storing system, said computer readable medium comprising:

first storing program code means for storing digital information with a signature in a first storing means and extracting said digital information with a signature;

second storing program code means for storing a manifest corresponding to digital information in a second storing means and extracting said manifest corresponding to digital information;

first authentication program code means for verifying that said manifest is valid; and first authentication program code means for verifying that said manifest is valid.

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21. The computer readable medium as 25 claimed in claim 20, said first authentication program code means comprising:

program code means for determining whether said digital information stored in said first storing means is valid by verifying that said manifest corresponding to said information is stored in said second storing means; and

program code means for determining that said digital information is valid only when said manifest is stored in said second storing means and determining that said digital information is invalid when said manifest is not stored in said second storing means.

5 22. The computer readable medium as claimed in claim 20, comprising:
signature program code means for pr

signature program code means for providing a signature to digital information;

second authentication program code means

10 for verifying that the signer of said manifest is
included in accredited objects and for verifying
that the signer of accredited information and the
signer of said digital information;

program code means for extracting said

15 manifest when said user apparatus moves said

manifest;

program code means for providing a signature to said manifest by using said signature program code means;

20 program code means for deleting said manifest from said second storing means;

program code means for verifying that the signer of said manifest is trusted by the signer of said digital information by using said second

25 authentication program code means; and

program code means for moving said manifest only when the verification succeeds.

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23. A computer readable medium storing program code for causing a computer to store digital information which has a value, said computer being used as an issuer apparatus in a data storing system, said computer readable medium comprising:

accredited information generation program

code means for generating accredited information which includes a set of information representing accredited object trusted by the signer of said digital information;

signature program code means for providing a signature to said digital information and to said accredited information;

manifest generation program code means for generating said manifest;

program code means for sending said digital information and said accredited information to a user apparatus;

program code means for receiving session information which includes a verification key of said user apparatus and a serial number; and

program code means for sending information including said manifest and said session information by using a verification key and a signature function of said issuer apparatus.

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24. A computer readable medium storing
25 program code for causing a computer to store digital information which has a value, said computer being used as a collector apparatus in a data storing system, said computer readable medium comprising:

program code means for receiving digital
30 information with a signature of the issuer and
accredited information with said signature from a
user apparatus;

program code means for generating session information which has uniqueness in said data storing system and sending said session information to said user apparatus;

program code means for receiving

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information including said manifest and said session information from said user apparatus; and

program code means for verifying that said session information, said manifest and said accredited information are valid.

- 25. An original data circulation method in an original data circulation system for storing or circulating original data which is digital information, said method comprising:
- a sending step of sending, by a first

 15 apparatus, originality information, said originality

 information including first information which

 corresponds to an apparatus and second information

 which is data or information corresponding to the

 data; and
- an identifying step of identifying, by a second apparatus, a source apparatus of said originality information;
 - a first authentication step of determining that said originally information is valid when said source apparatus is authenticated; and
 - a second authentication step of determining that said originality information is valid only when said source apparatus and an apparatus corresponding to said first information of said originality information are the same.
- 35 26. The original data circulation method as claimed in claim 25 said method further comprising:

a step of concealing, by said first apparatus, a private key; and

a step of storing or obtaining, by said second apparatus, a hash value of said second apparatus which hash value is generated by applying a unidirectional function to a public key corresponding to one or a plurality of private keys;

said first authentication step including:

a step of authenticating said first

10 apparatus by verifying that said first apparatus has a private key corresponding to said hash value.

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27. The original data circulation method as claimed in claim 25, wherein said sending step includes a step of sending a third party certificate to said second apparatus, said third party certificate being a certificate representing that said first apparatus is authenticated by one or a plurality of third parties, and said third party certificate corresponding to a certifier of a third party;

25 said method further including:

a step of storing or obtaining, by said second apparatus, third party information corresponding to one or a plurality of third parties;

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said first authentication step including:
a step of authenticating said first
apparatus by verifying that said first apparatus is
an object to be authenticated in said third party
certificate and that a certifier of said third party
certificate is included in third parties in said
third party information.

28. The original data circulation method
5 as claimed in claim 27, said method further
comprising a step of storing or obtaining, by said
second apparatus, third party accredited information
corresponding to said first information and one or a
plurality of third parties;

said first authentication step including:
a step of authenticating said first
apparatus by verifying that said first apparatus is
an object to be authenticated in said third party
certificate and that a certifier of said third party
certificate is included in third parties in said
third party accredited information, said third
parties corresponding to said first information and
being extracted from said third party accredited
information.

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29. The original data circulation method
25 as claimed in claim 27, said method further
comprising a step of storing or obtaining, said
second apparatus, third party accredited information
corresponding to said first information and one or a
plurality of third parties;

said first authentication step including:
a step of authenticating said first
apparatus by verifying that a certifier of said
third party certificate is included in third parties
extracted from said third party accredited
information, said third parties corresponding to
said first information and said second information.

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30. The original data circulation method
5 as claimed in claim 25, said method further
including:

a step of concealing, by said first apparatus, a private key; and

a step of sending a public key certificate

10 and a signature by a private key, said public key
certificate being a public key of said private key
to which a signature by a third party which trusts
said first apparatus is provided;

a step of identifying, by said second apparatus, the public key of said third party by verifying said public key certificate; and

a step of storing or obtaining one or a plurality of hash values;

said first authentication step including:

a step of authenticating said first apparatus by verifying that said signature by using said public key included in said public key certificate and by verifying that information generated by applying a unidirectional function to said public key of said third party is included in said hash values.

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31. The original data circulation method as claimed in claim 25, said method further including a step of storing or obtaining, by said second apparatus, user accredited information corresponding to said first information and one or a plurality of third parties;

said first authentication step including:

a step of authenticating said first apparatus by verifying that said source apparatus is included in information corresponding to said first apparatus extracted from said first information by using said user accredited information.

32. The original data circulation method as claimed in claim 25, said method further including a step of storing or obtaining, by said second apparatus, user accredited information corresponding to one or a plurality of said first apparatuses from said first information and said second information;

said first authentication step including:
 a step of authenticating said first
apparatus by verifying that said source apparatus is
included in information on said first apparatuses
extracted from said user accredited information,
said information corresponding to said first
information and second information.

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33. An original data circulation system for storing or circulating original data which is digital information, said system comprising:

a first apparatus which includes sending means for sending originality information, said originality information including first information which corresponds to an apparatus and second information which is data or information corresponding to the data; and

a second apparatus which includes:

identifying means for identifying a source apparatus of said originality information;

a first authentication means for determining that said originally information is valid when said source apparatus is authenticated; and

a second authentication means for determining said originality information is valid only when said source apparatus and an apparatus corresponding to said first information of said originality information are the same.

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34. The original data circulation system as claimed in claim 33, wherein said first apparatus further includes means for concealing a private key; said second apparatus further including

- 20 means for storing or obtaining a hash value of said second apparatus which hash value is generated by applying a unidirectional function to a public key corresponding to one or a plurality of private keys; and
- said first authentication means of said second apparatus authenticating said first apparatus by verifying that said first apparatus has a private key corresponding to said hash value.

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35. The original data circulation system as claimed in claim 33 wherein said sending means includes means for sending a third party certificate to said second apparatus, said third party certificate being a certificate representing that

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said first apparatus is authenticated by one or a plurality of third parties, and said third party certificate corresponding to a certifier of a third party;

said second apparatus including means for storing or obtaining third party information corresponding to one or a plurality of third parties; and

said first authentication means

10 authenticating said first apparatus by verifying that said first apparatus is an object to be authenticated in said third party certificate and that a certifier of said third party certificate is included in third parties in said third party information.

as claimed in claim 35, wherein said second apparatus includes means for storing or obtaining third party accredited information corresponding to said first information and one or a plurality of third parties;

said first authentication means authenticating said first apparatus by verifying that said first apparatus is an object to be authenticated in said third party certificate and that a certifier of said third party certificate is included in third parties in said third party accredited information, said third parties corresponding to said first information and being extracted from said third party accredited

35 information.

37. The original data circulation system as claimed in claim 35, wherein said second apparatus includes mean's for storing or obtaining third party accredited information corresponding to said first information and one or a plurality of third parties;

said first authentication means authenticating said first apparatus by verifying 10 that a certifier of said third party certificate is included in third partlies extracted from said third party accredited information, said third parties corresponding to said first information and said second information. 15

38. The original data circulation system 20 as claimed in claim 3\beta, wherein said first apparatus includes:

means for concealing a private key; and means for sending a public key certificate and a signature by a private key, said public key certificate being a public key of said private key to which a signature by a third party which trusts said first apparatus is provided;

said second apparatus including:

30 means for identifying the public key of said third party by verifying said public key certificate: and

means for storing or obtaining one or a plurality of hash values; and

said first authentication means 35 authenticating said first apparatus by verifying that said signature by using said public key

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included in said public key certificate and by verifying that information generated by applying a unidirectional function to said public key of said third party is included in said hash values.

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39. The original data circulation system
10 as claimed in claim 33 wherein said second
apparatus includes means for storing or obtaining
user accredited information corresponding to said
first information and one or a plurality of third
parties;

said first authentication means authenticating said first apparatus by verifying that said source apparatus is included in information corresponding to said first apparatus extracted from said first information by using said user accredited information.

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40. The original data circulation system as claimed in claim 33, wherein said second apparatus includes means for storing or obtaining user accredited information corresponding to one or a plurality of said first apparatuses from said first information and said second information;

said first authentication means authenticating said first apparatus by verifying that said source apparatus is included in information on said first apparatuses extracted from said user accredited information, said information corresponding to said first information and second information.

5	41. An issuer apparatus in an original
	data circulation system for storing or circulating
	original data which is digital information, said
	issuer apparatus comprising:
	originality information generation means
10	for generating originality information which
	includes first information corresponding to said
	issuer apparatus and second information
	corresponding to data or information corresponding
	to the data; and
15	originality information sending means for
	sending said originality information.
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	42. The issuer apparatus as claimed in
	claim 41, comprising:
	means for concealing a private key; and
	means for generating a hash value of said
25	issuer apparatus as said first information, said
	hash value is generated from a public key of said
	private key by applying a unidirectional function.
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claim 41, comprising means for generating said

The issuer apparatus as claimed in

second information by applying an unidirectional function to said data.

43.

44. The issuer apparatus as claimed in claim 43, wherein said second information is an identifier which identifies contents in a network. 5

10 45. A user apparatus in an original data circulation system for storing or circulating original data which is digital information, said user apparatus comprising:

originality information sending means for 15 sending originality information which includes first information corresponding an apparatus and second information corresponding to data or information corresponding to the data;

identifying means for identifying a source 20 apparatus of said originality information which is sent from an apparatus;

authentication means for determining that said originality information is valid when said source apparatus is duthenticated or when said

25 apparatus corresponding to said first information and said source apparatus is the same; and

storing means for storing said originality information when said authentication means determines that said priginality information is valid.

35 46. The user apparatus as claimed in claim 45, comprising means for deleting said originality information when said user apparatus sends said

originality information.

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47. A collector apparatus in an original data circulation system for storing or circulating original data which is digital information, said collector apparatus comprising:

10 identifying means for identifying a source apparatus of originality information;

authentication means for authenticating said source apparatus; and

data processing means for performing a 15 process corresponding to said data or data corresponding to said second information when said authentication means determines that said originality information which is sent to said collector apparatus is valid.

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48. The collector apparatus as claimed in claim 47, said collector apparatus further 25 comprising means for storing or obtaining issuer information:

said data processing means performing a process corresponding to said data or data corresponding to said second information when said authentication means determines that said originality information which is sent to said collector apparatus is valid and when said issuer apparatus corresponding to said first information is included in said issuer information.

49. An original data circulation system for storing or circulating original data which is digital information, said original data circulation system comprising:

an issuer apparatus which includes means for generating originality information and sending said originality information, said originality information including first information corresponding to said issuer apparatus and second information corresponding to data;

a user apparatus which includes means for verifying validity of a source apparatus of said originality information and means for storing said originality information when said validity is verified; and

a collector apparatus which includes means for verifying validity of an source apparatus of said originality information and data processing means for processing data corresponding to said second information when said validity is verified.

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50. An original data circulation system for storing or circulating original data which is digital information, said original data circulation system comprising:

an issuer apparatus including:

first originality information generation means for generating originality information which includes first information corresponding to said issuer apparatus and second information corresponding to data or information corresponding to the data; and

first originality information sending means for sending said originality information; a user apparatus including:

first originality information sending means for sending originality information which includes first information corresponding to an apparatus and second information corresponding to data or information corresponding to the data;

first identifying means for identifying a 10 source apparatus of said originality information which is sent from an apparatus;

and said source apparatus is the same; and

first authentication means for determining that said originality information is valid when said source apparatus is authenticated or when said apparatus corresponding to said first information

storing means for storing said originality information when said first authentication means determines that said originality information is valid; and

a collector apparatus including:
second identifying means for identifying a
source apparatus of originality information;
second authentication means for

authenticating said source apparatus; and
data processing means for performing a
process corresponding to said data or data
corresponding to said second information when said
second authentication means determines that said
originality information which is sent to said

collector apparatus is valid.

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51. The original data circulation system as claimed in claim 49, said collector apparatus

further comprising means for sending said originality information sent from said user apparatus to said issuer apparatus;

said issuer apparatus further comprising:
means for verifying that said originality
information is generated by said issuer apparatus;
means for verifying that said originality
information is sent via a valid route;

means for verifying that said data corresponding to said second information has been processed by said data processing means; and means for providing a value according to

said data to said collector apparatus.

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52. The original data circulation system as claimed in claim 49, said issuer apparatus
20 further comprising means for adding a usable number of said data as count information to said originality information;

said user apparatus further comprising means for verifying said count information;

said collector apparatus further comprising means for verifying said count information;

wherein said user apparatus can use said data said usable number of times.

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53. The original data circulation system
35 as claimed in claim 49, wherein an apparatus in said
data circulation system sends session information
which has uniqueness in said data circulation system

when said apparatus sends said originality information;

an apparatus of the sending side which sends said originality information stores said originality information and said session information in said apparatus of the sending side;

an apparatus of the receiving side sends said session information to said apparatus of the sending side when receiving said originality information: and

said apparatus of the sending side deletes said originality information and said session information which are stored in said apparatus of the sending side.

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54. The original data circulation system
20 as claimed in claim 49, said user apparatus further comprising means for generating said originality information.

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55. A computer readable medium storing program code for causing a computer in an original data circulation system to store or circulate original data which is digital information, said computer readable medium comprising:

first program code means which is loaded in a first apparatus, first program code means comprising sending program code means for sending originality information, said originality information including first information which corresponds to an apparatus and second information

which is data or information corresponding to the data; and

a second program code means which is loaded in a second apparatus, said second program code means comprising:

identifying program code means for identifying a source apparatus of said originality information;

first authentication program code means

10 for determining that said originally information is
valid when said source apparatus is authenticated;
and

second authentication program code means for determining that said originality information is valid only when said source apparatus and an apparatus corresponding to said first information of said originality information are the same.

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56. The computer readable medium as claimed in claim 55, said first program code means further comprising program code means for concealing a private key;

said second program code means further comprising program code means for storing or obtaining a hash value of said second apparatus which hash value is generated by applying a unidirectional function to a public key corresponding to one or a plurality of private keys;

said first authentication program code means including program code means for authenticating said first apparatus by verifying that said first apparatus has a private key corresponding to said hash value.

57. The computer readable medium as
5 claimed in claim 55, said sending program code means including:

program code means for sending a third party certificate to said second apparatus, said third party certificate being a certificate representing that said first apparatus is authenticated by one or a plurality of third parties, and said third party certificate corresponding to a certifier of a third party;

said second program code means further

15 including program code means for storing or
obtaining third party information corresponding to
one or a plurality of third parties; and

said first authentication program code means including program code means for

- authenticating said first apparatus by verifying that said first apparatus is an object to be authenticated in said third party certificate and that a certifier of said third party certificate is included in third parties in said third party
- 25 information.

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58. The computer readable medium as claimed in claim 57, said second program code means including program code means for storing or obtaining third party accredited information corresponding to said first information and one or a plurality of third parties;

said first authentication program code means including program code means for

authenticating said first apparatus by verifying that said first apparatus is an object to be authenticated in said third party certificate and that a certifier of said third party certificate is included in third parties in said third party accredited information, said third parties corresponding to said first information and being extracted from said third party accredited information.

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59. The computer readable medium as claimed in claim 57, said second program code means 15 including program code means for storing or obtaining third party accredited information corresponding to said first information and one or a plurality of third parties;

said first authentication program code means including program code means for authenticating said first apparatus by verifying that a certifier of \$aid third party certificate is included in third parties extracted from said third 25 party accredited information, said third parties corresponding to said first information and said second information.

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60. The computer readable medium as claimed in claim 55, said first program code means including:

35 program code means for concealing a private key; and program code means for sending a public

key certificate and a signature by a private key, said public key certificate being a public key of said private key to which a signature by a third party which trusts said first apparatus is provided;

said second program code means including:

program code means for identifying the

public key of said third party by verifying said

public key certificate; and

program code means for storing or obtaining one or a plurality of hash values;

said first authentication program code means including program code means for authenticating said first apparatus by verifying said signature by using said public key included in said public key certificate and by verifying that information generated by applying a unidirectional function to said public key of said third party is included in said hash values.

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61. The computer readable medium as claimed in claim 55, said second program code means including program code means for storing or obtaining user accredited information corresponding to said first information and one or a plurality of third parties;

said first authentication program code
means including program code means authenticating
said first apparatus by verifying that said source
apparatus is included in information corresponding
to said first apparatus extracted from said first
information by using said user accredited
information.

62. The computer readable medium as claimed in claim 55, said second program code means including program code means for storing or obtaining user accredited information corresponding to one or a plurality of said first apparatuses from said first information and said second information; said first authentication program code means including means for authenticating said first apparatus by verifying that said source apparatus is included in information on said first apparatuses.

means including means for authenticating said first apparatus by verifying that said source apparatus is included in information on said first apparatuses extracted from said user accredited information, said information corresponding to said first

15 information and second information.

20 63. A computer readable medium storing program code for causing a computer in an original data circulation system to store or circulate original data which is digital information, said computer being used as an issuer apparatus, said computer readable medium comprising:

originality information generation program code means for generating originality information which includes first information corresponding to said issuer apparatus and second information corresponding to data or information corresponding to the data; and

originality information sending program code means for sending said originality information.

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64. The computer readable medium as claimed in claim 63, further comprising:

program code means for concealing a private key; and

program code means for generating a hash value of said issuer apparatus as said first information, said hash value is generated from a public key of said private key by applying a unidirectional function.

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65. The computer readable medium as
15 claimed in claim 63, further comprising program code
means for generating said second information by
applying an unidirectional function to said data.

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- 66. The computer readable medium as claimed in claim 65, further comprising program code means for using an identifier which identifies contents in a network as said second information.
- original data which is digital information, said computer being used as a user apparatus, said computer readable medium comprising:

originality information sending program code means for sending originality information which

includes first information corresponding to an apparatus and second information corresponding to data or information corresponding to the data;

identifying program code means for identifying a source apparatus of said originality information which is sent from an apparatus;

authentication program code means for determining that said originality information is valid when said source apparatus is authenticated or when said apparatus corresponding to said first information and said source apparatus is the same; and

storing program code means for storing said originality information when said authentication program code means determines that said originality information is valid.

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68. The computer readable medium as claimed in claim 67, further comprising program code means for deleting said originality information when said user apparatus sends said originality

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original data which is digital information, said computer being used as a collector apparatus, said

35 computer readable medium comprising:

identifying program code means for identifying a source apparatus of originality

information;

authentication program code means for authenticating said source apparatus; and

data processing program code means for performing a process corresponding to said data or data corresponding to said second information when said authentication program code means determines that said originality information which is sent to said collector apparatus is valid.

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70. The computer readable medium as
15 claimed in claim 69, further comprising:
 program code means for storing or
 obtaining issuer information;

said data processing program code means including program code means for performing a process corresponding to said data or data corresponding to said second information when said authentication program code means determines that said originality information which is sent to said collector apparatus is valid and when said issuer apparatus corresponding to said first information is included in said issuer information.

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71. A computer readable medium storing program code for causing computers in an original data circulation system to store or circulate original data which is digital information, said computer readable medium comprising:

issuer program code means which is loaded in an issuer apparatus, said issuer program code

means including:

first originality information generation program code means for generating originality information which includes first information corresponding to said issuer apparatus and second information corresponding to data or information corresponding to the data; and

first originality information sending program code means for sending said originality information:

user program code means which is loaded in a user apparatus, said user program code means including:

first originality information sending

15 program code means for sending originality
information which includes first information
corresponding to an apparatus and second information
corresponding to data or information corresponding
to the data;

first identifying program code means for identifying a source apparatus of said originality information which is sent from an apparatus;

first authentication program code means for determining that said originality information is valid when said source apparatus is authenticated or when said apparatus corresponding to said first information and said source apparatus are the same; and

storing program code means for storing
said originality information when said first
authentication program code means determines that
said originality information is valid; and

collector program code means which is loaded in a collector apparatus, said collector program code means including:

second identifying program code means for identifying a source apparatus of originality

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information;

second authentication program code means for authenticating said source apparatus; and

data processing program code means for performing a process corresponding to said data or data corresponding to said second information when said second authentication program code means determines that said originality information which is sent to said collector apparatus is valid.